

homologue or fragment is cloned between two promoters capable of producing dsRNA from said DNA library, homologue or fragment upon binding of said transcription factor to said promoters.

6. (amended) A method according to any of claims 1 [to 5] or 3 wherein said cell is adapted to express said transcription factor.

7. (amended) A method according to any of claims 1 [to 6] or 3 wherein said DNA library, homologue or fragment is constructed in a suitable vector which comprises a sequence of nucleotides encoding said transcription factor operably linked to a suitable promoter.

8. (amended) A method according to any of claims 1 [to 6] or 3 wherein said transcription factor is encoded by a further vector independent of the vector including said DNA library, DNA homologue or fragment and which sequence encoding said transcription factor is operably linked to a suitable promoter.

9. (amended) A method according to claim 7 [or 8] wherein said transcription factor comprises any of T7, T3 or SP6 polymerase.

10. (amended) A method according to claim 7 [or 8] wherein said suitable promoter comprises any of let 858, SERCA, UL6, myo-2 or myo-3.

11. (amended) A method according to [any of] claim[s] 7 [to 10], wherein said suitable vector or said further vector comprises a selectable marker.

16. (amended) A method according to any of [preceding] claims 1 or 3 wherein said cell is a microorganism suitable for feeding to, transforming or infecting an organism.

17. (amended) A method according to any of claims 1 [to 14] or 3 wherein said cell is contained in an organism or an embryo thereof.

18. (amended) A method according to any of claims 1 [to 17] or 3 wherein said promoters are T7 promoters.

19. (amended) A method according to [any of] claim[s] 12 [to 18] wherein said known gene sequence comprises a sup-35 gene or a fragment thereof which is selectable by identifying offspring growing at a temperature above 25°C following introduction of said vector in the genome of a pha-21 et123ts mutant *C. elegans* worm.

20. (amended) A method according to any of claims 1 [to 19] or 3 wherein said cell or organism is contacted with a specified compound for screening for a desired phenotype, such as resistance or sensitivity to said compound when compared to the wild type cell or organism.

21. (amended) A method according to any of [preceding] claims 1 or 3 wherein said transcription factor is inducible.

Q3 23. (amended) A method according to [any of] claim[s] 17 wherein said organism is selected from the class nematoda.

Q4 27. (amended) A method according to claim 25 [or 26] wherein said second construct comprises said desired DNA sequence in an orientation relative to said promoter so as to be capable of initiating transcription of said DNA to dsRNA upon binding of said transcription factor thereto.

Q5 30. (amended) A method according to [any of] claim[s] 25 [to 29] wherein said second transgenic organism further comprises a reporter gene operably linked to a promoter which is capable of initiating transcription of said reporter upon binding of said transcription factor thereto.

31. (amended) A method according to [any of] claim[s] 25 [to 30] wherein said transcription factor comprises a polymerase.

Q6 33. (amended) A method according to [any of] claim[s] 25 [to 31] wherein said promoters comprises any of T7, T3 or SP6 promoters.

Q7 35. (amended) A method according to [any of] claim[s] 25 [to 30] wherein said organism is of the [species] class nematoda.

Q8 37. (amended) A transgenic non-human multicellular organism obtainable according to the method[s] of [any one of] claim[s] 25 [to 34].

Q9 41. (amended) A method according to [any of] claim[s] 38 [to 40] wherein said transcription factor is inducible in said cell.

42. (amended) A method according to [any of] claim[s] 38 [to 41] wherein said promoter is a phage polymerase promoter and said transcription factor is a RNA polymerase.

Q10 45. (amended) A method according to [any of] claim[s] 38 [to 44] wherein said construct is such that it may be used in yeast two hybrid experiments.

46. (amended) A method according to [any of] claim[s] 38 [to 45] wherein said cell is an *E. coli* cell.

47. (amended) A method according to [any of] claim[s] 38 [to 45] wherein said cell is part of an organism or an embryo thereof.

Q11 49. (amended) Plasmid pGN1 as [illustrated in Figure 1] set forth in SEQ ID NO:1.

50. (amended) Plasmid pGN100 as [illustrated in Figure 2] set forth in SEQ ID NO:2.

51. (amended) A [The] yeast two hybrid vector plasmid [illustrated] as set forth in any of [Figures 4, 15 or 16] [SEQ ID NOs 8 and 9].

012 63. (amended) An expression vector according to [any of] claim[s] 60 [to 62] which further comprises a nucleotide sequence encoding a selectable marker.

013 67. (amended) An expression vector according to claim 63 [or 64] wherein said selectable marker comprises a nucleotide sequence encoding sup-35, for introduction into *C. elegans* having a pha-1 mutation.

68. (amended) An expression vector for expressing an appropriate transcription factor for use in a method according to any of claims 1 or 3 [to 48 and 54 to 59] which vector comprises a sequence of nucleotides encoding said transcription factor operably linked to suitable expression control sequences.

014 70. (amended) An expression vector according to [any of] claim[s] 68 [to 69] wherein said transcription factor comprises a phage polymerase[, and preferably T7 RNA polymerase].

71. (amended) An organism or cell transformed or transfected with a plasmid according to [any of] claim[s] 49 [to 53 or an expression vector according to any of claims 60 to 70].

72. (amended) An organism according to claim 71, which is of the [species] class nematoda [and preferentially *C. elegans*].

73. (amended) A method of introducing dsRNA or DNA capable of producing dsRNA into an organism which method comprises feeding said organism with a suitable microorganism comprising an expression vector according to [any of] claim[s] 60 [to 67] or feeding said organism directly with an expression vector according to [any of] claim[s] 60 [to 67].

015 76. (amended) A method according to [any of] claim[s] 73 [to 75] wherein said organism is *C. elegans* and said microorganism is *E. coli*.

014 78. (amended) A method according to [any of] claim[s] 73 [to 75] wherein said organism is a *C. elegans* nuc-1 mutant.

79. (amended) A selection system for identifying transformation of a cell or organism with a vector according to claim[s] 60 [to 63] which system comprises a vector according to claim[s] 60 [to 63] and said selectable marker comprises a nucleotide sequence capable of inhibiting or preventing expression of a gene in said cell or organism which gene is responsible for conferring a known phenotype.

017 90. (amended) A method according to [any of] claim[s] 87 [to 89] wherein said promoter is any of T3, T7 or SP6 promoter.

Please add the following new claim: